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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,821	08/09/2006	Norbert Weber	51554	9769

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ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

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WASHINGTON,, DC 20036

EXAMINER

HOOK, JAMES F

ART UNIT

PAPER NUMBER

3754

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DELIVERY MODE

02/06/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/588,821

**Applicant(s)**

WEBER, NORBERT

**Examiner**

James F. Hook

**Art Unit**

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 8/9/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Weber (DE 10161797).

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Housherr (DE 7113311).

Claims 2, 12, and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Zahid (GB 1,531,612).

Claims 2, 12, and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yamamoto (736).

Claims 2 and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Haug (363).

Claims 1, 3-5 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen. The reference to Allen discloses the recited hydraulic accumulator comprising

a housing in the form of a tube 25, a separating element in the form of a longitudinally moving piston 40 that separates two pressure compartments on either side of the piston, the tube is sealed at one end by a cover like sealing component 27 that has a thicker portion in the center of the cover member and has a bearing surface near an annular surface near 28 and inside of the annular surface is an annular surface that extends into the interior of the tube for positive locking support of the tube wall against radial forces inherently and thereby forming from the annular bearing surface and inwardly extending member positively locks can be formed by threaded portions which are further radially extending projecting extension members for a chamfer and fastening elements for the cap member, the method of forming the member in claims 5 and 9 are method steps in article claims and provides no limiting structure to the member, where the structure claimed is met by the cap where the method used to achieve the shape is not limiting to the article claim, there are at least two flange members formed by the cap including the threaded portions and including three, and a connection 38 is provided, where the caps are formed on each end.

Claims 1, 3, 5, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by McCuiston. The reference to McCuiston discloses the recited hydraulic accumulator comprising a housing in the form of a tube 1,3, a separating element in the form of a longitudinally moving piston 5 that separates two pressure compartments on either side of the piston, the tube is sealed at one end by a cover like sealing component 2 that has a thicker portion in the center of the cover member and has a bearing surface near an annular surface near the annular edge of the cover member

and inside of the annular surface is an annular surface that extends into the interior of the tube for positive locking support of the tube wall against radial forces inherently and thereby forming from the annular bearing surface and inwardly extending member positively locks can be formed by annular grooves that receive the wall and fastening elements for the cap member, the method of forming the member in claims 5 and 9 are method steps in article claims and provides no limiting structure to the member, where the structure claimed is met by the cap where the method used to achieve the shape is not limiting to the article claim, there are at least two flange members formed by the cap including the threaded portions and including three, and a connection 15 is provided.

Claims 1, 3-5 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Davies. The reference to Davies discloses the recited hydraulic accumulator comprising a housing in the form of a tube 1, a separating element in the form of a longitudinally moving piston 4 that separates two pressure compartments on either side of the piston, the tube is sealed at one end by a cover like sealing component 3 that has a thicker portion in the center of the cover member and has a bearing surface near an annular surface near 14 and inside of the annular surface is an annular surface that extends into the interior of the tube for positive locking support of the tube wall against radial forces inherently and thereby forming from the annular bearing surface and inwardly extending member positively locks can be formed by threaded portions which are further radially extending projecting extension members for a chamfer and fastening elements for the cap member, the method of forming the member in claims 5 and 9 are method steps in article claims and provides no limiting structure to the

member, where the structure claimed is met by the cap where the method used to achieve the shape is not limiting to the article claim, there are at least two flange members formed by the cap including the threaded portions and including three, and a connection 10 is provided, where the caps are formed on each end.

Claims 1-5, 7, 9, 10, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Elmer. The reference to Elmer discloses the recited hydraulic accumulator comprising a housing in the form of a tube 5, a separating element in the form of a longitudinally moving piston 1 with a piston seal 4 that separates two pressure compartments on either side of the piston, the tube is sealed at one end by a cover like sealing component 6 that has a thicker portion in the flange of the cover member and has a bearing surface near an annular surface and inside of the annular surface is an annular surface that extends into the interior of the tube for positive locking support of the tube wall against radial forces inherently and thereby forming from the annular bearing surface and inwardly extending member positively locks can be formed by threaded portions which are further radially extending projecting extension members for a chamfer and fastening elements for the cap member, the method of forming the member in claims 5 and 9 are method steps in article claims and provides no limiting structure to the member, where the structure claimed is met by the cap where the method used to achieve the shape is not limiting to the article claim, there are at least two flange members formed by the cap including the threaded portions and including three, and a connection 3 and 7 are provided, where the caps are formed on each end, where the cap member 6 is formed with a curved dome and the method used to form it

is not limiting in an article claim, and where the curved portion forms an elevation of the end component, and the dome has a filling component near 7 with the dome forming a concave shape on the exterior of the cap.

Claims 1-3, 5, 7, 9, 10, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Purvis. The reference to Purvis discloses the recited hydraulic accumulator comprising a housing in the form of a tube 86, a separating element in the form of a longitudinally moving piston 100 that separates two pressure compartments on either side of the piston, the tube is sealed at one end by a cover like sealing component 88 that has a thicker portion in the center of the cover member and has a bearing surface near an annular surface and inside of the annular surface is an annular surface that extends into the interior of the tube for positive locking support of the tube wall against radial forces inherently and thereby forming from the annular bearing surface and inwardly extending member positively interlocked, the method of forming the member in claims 5 and 9 are method steps in article claims and provides no limiting structure to the member, where the structure claimed is met by the cap where the method used to achieve the shape is not limiting to the article claim, there are at least two flange members formed by the cap including the threaded portions and including three, and a connection 38 is provided, where the caps are formed on each end, where the member is formed as a curved dome and has an access hole therein wherein both end caps have domed shapes.

Claims 2, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Gratzmuller. The reference to Gratzmuller discloses the recited hydraulic accumulator

comprising a housing in the form of a tube 1, a separating element in the form of a longitudinally moving piston 13 that separates two pressure compartments on either side of the piston, the tube is sealed at one end by a cover like sealing component 3 a curved dome is seen at the upper end of the housing opposite plug 3, the method of forming the member in claim 2 is a method step in article claim and provides no limiting structure to the member, where the structure claimed is met by the dome where the method used to achieve the shape is not limiting to the article claim, and a connection is provided in the dome.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen, McCuiston, or Davies. The references to Allen, McCuiston, and Davies disclose all of the recited structure above with the exception of the using a weld and specific angles of the curvature, however such are considered to be obvious choices of mechanical expedients. It would have been obvious to one skilled in the art to modify the angles of Allen, McCuiston, and Davies to be of any angle where routine experimentation is all that is required to arrive at optimum results and creating enough holding force to hold the cap in place, and to use any old and known method of



attachment including a weld where such is a known method of connecting the housing to the caps to insure a more permanent and stronger seal thereby preventing leakage and saving money in replacement costs, where such is merely a choice of mechanical expedients.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elmer or Purvis. The references to Elmer and Purvis disclose all of the recited structure with the exception of preferably forming 3 flange components, however such is considered an obvious choice of mechanical expedients to choose any number of flange components and it would have been obvious to one skilled in the art to modify the extensions in Elmer and Purvis to have any number of flange components including 3 as such is merely a choice of mechanical expedients and would have been an obvious duplication of parts that would require only routine experimentation to arrive at optimum values to insure a proper seal thereby saving money by preventing failure of the device.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Mercier, and Ghiotto disclosing state of the art accumulators.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James F. Hook/  
Primary Examiner, Art Unit 3754

JFH